

REMARKS/ARGUMENTS

In light of the remarks to follow, reconsideration and allowance of this application are requested.

Claims 1-2, 5-9, and 12-14 have been rejected under 35 U.S.C. §102(e) as being anticipated by Apte et al. U.S. Patent No. 6,269,373 (Apte et al.) and the claims 3-4 and 10-11 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Apte et al. and further in view of U.S. Published Application No. 2002/0147696 (Acker et al.). Applicants respectfully traverse these rejections.

Applicants submit that Apte et al. and Acker et al. are not prior art under 35 U.S.C. § 102 and the § 102 and §103 rejections in Paper Nos. 5 and 8 based on Apte et al. and Acker et al. are improper and should be withdrawn. As stated in the Declaration filed on April 19, 2004, applicants respectfully submit that well prior to the February 26, 1999 filing date of the Apte et al. patent (and well prior to the August 12, 1999 filing date of the Acker et al. published application), the present invention was conceived and reduced to practice. Both the Apte et al. patent and Acker et al. published application are therefore inapplicable as § 102 prior art and a reference that does not qualify as prior art under § 102 cannot be basis of a rejection under § 102 and §103. Applicant therefore respectfully request that rejections based on allegedly anticipation by Apte et al. and/or obviousness over the combination of Apte et al. patent and Acker et al. published application be reconsidered and withdrawn.

The Examiner alleges that the evidence submitted with the Declaration is insufficient to establish a conception of the invention of Apte et al. Applicant respectfully directs the Examiner attention to Exhibit B which includes a sample source code for SmartHandle.java, including the java.util.Comparable interface and delegation to a SmartKey for comparing attributes associated with the primary key to permit two EJB Handles to be compared without instantiating the corresponding Entity EJB Objects. Accordingly, Applicants respectfully submits that the evidence submitted with Declaration filed on April 19, 2004 is sufficient to establish a conception of the invention

prior to the effective date of Apte et al.

Moreover, contrary to the Examiner's assertion, Apte et al. independently or in combination with Acker et al. does not teach or suggest the present invention recited in claims 1 and 8. Apte et al. relates to a method for persisting a container-managed server object or bean in a distributed data processing system. Acker et al. relates to a system and method for improving name service behavior in a object-oriented programming environment, i.e., name service scoping behavior. Only the present invention teaches or suggests a SmartHandle which extends the capabilities of the EJB Handle, such as enabling part comparison of two EJB Handles without instantiating the actual EJB object, thereby advantageously enabling the present invention to order a list of SmartHandles without accessing the remote objects that they refer to (i.e., actual EJB objects).

The Examiner incorrectly alleges that Apte et al. teaches the step of "maintaining an instance of a SmartKey that describes said primary key for a database column to which an Entity EJB object is mapped," as required in claim 1 and similarly in claim 8. In fact, col. 16, lines 57-65 and col. 17, lines 21-28 in Apte et al., cited by the Examiner, merely recite that "a container implemented on top of an RDBMS may manage persistence by storing each bean's data as a row in a table." Whereas the present invention teaches that the instance of a SmartKey that describes the primary key to be maintained in a database column to which an Entity EJB object is mapped. This advantageously allows the SmartKeys and the SmartHandles that contain them to be easily compared and stored in ordered lists.

Additionally, the Examiner incorrectly alleges that Apte et al. teaches the step of "maintaining an Entity EJB object relationship thorough a combination of a proxy pattern, an EJB Handle, and a primary key of the EJB Handle," as required in claim 1 and similarly in claim 8. In fact, col. 16, lines 40-52 in Apte et al., cited by the Examiner, merely describes that "An entity bean can be created in two ways ..." Applicants are puzzled as to how "creation of an entity bean" is equivalent to "maintaining an Entity EJB object relationship."

Further, the Examiner incorrectly alleges that the Apte et al. teaches the step of

“storing EJB Home class from which an Entity EJB was generated and from which said Entity EJB can be re-instantiated,” as required in claim 1 and similarly in claim 8. In fact, col. 16, lines 53-56 in Apte et al., cited by the Examiner, merely recites that “the bean is entirely responsible for storing and retrieving its instance data.” However, applicants respectfully submits that one of ordinary skill in the art would not equate the step storing of its instance data by the bean to the step of “storing EJB Home class from which an Entity EJB was generated and from which said EJB can be re-instantiated,” as called for in claim 1 (similarly in claim 8).

Applicants respectfully that the Examiner cannot contradict the clear teaching or change the principle of operation of the principal reference. “If the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the reference are not sufficient to render the claims *prima facie* obvious.” (MPEP § 2143.01 citing In re Gordon, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984) and In re Ratti, 270 F.2d 810, 123 USPQ 349 (CCPA 1959)).

In view of the foregoing differences, it is respectfully submitted that Apte et al. does not anticipate nor render obvious the invention as recited in claims 1 and 8, therefore, claims 1 and 8 are patentably distinct over this prior art. It is requested the rejection of claims 1 and 8 under 35 U.S.C. §102(e) be withdrawn.

Since claims 2, 5-7, 9 and 12-14 depend from claims 1 and 8, respectively, the foregoing discussion of claims 1 and 8 is equally applicable to claims 2, 5-7, 9 and 12-14 and is believed to obviate the rejection of claims 2, 5-7, 9 and 12-14.

In addition, it should be noted that claim 2 (and similarly claim 9) recites the step of “instantiating said Entity EJB object associated with said SmartHandle with a single method invocation.” Apte et al. neither teaches or suggests such instantiating step. In fact, col. 16, lines 10-17 in Apte et al., cited by the Examiner, merely describe “stateless session beans” and is not even remotely related to an Entity Bean.

Claim 5 (and similarly claim 12) defines that “said SmartKey includes said primary key of said EJB Handle, thereby providing portability to said Entity EJB object.”

Apte et al. neither teaches or suggests such SmartKey. In fact, col. 8, lines 58-67 in Apte et al., cited by the Examiner, merely describes that Remote Method Invocation depends on many features of Java-object serialization, portable, downloadable object implementations.

Claim 6 (and similarly claim 13) recites the step of “assigning each attribute of said Entity EJB object and said SmartKey to a separate column within a relational database table, thereby permitting the SmartHandle to be mapped to a multi-column relational database table.” Apte et al. neither teaches or suggests such assigning step where each attribute of the Entity EJB object and the SmartKey are assigned to a separate column. In fact, col. 16, lines 57-61 in Apte et al., cited by the Examiner, merely describes that “a container implemented on top of an RDBMS may manage persistence by storing each bean’s data as a row in a table.”

Claim 7 (and similarly claim 14) defines that SmartHandle includes at least attributes HomeClassName, KeyClassName and HomeName. Apte et al. does not teach or suggest such SmartHandle.

As stated herein, Acker et al. relates to process and system for providing name service scoping behavior. But Acker is not suggestive of the steps of maintaining an Entity EJB object relationship, storing EJB Home class from which an Entity EJB was generated and from which it can be re-instantiated, and maintaining an instance of a SmartKey that describes the primary key for a database column which an Entity EJB object is mapped, as required in claim 1 and similarly in claim 8. These, of course, are features recited by independent claims 1 and 8 (and thus are included in dependent claims 3-4 and 10-11) and not found in Apte et al. and Acker et al. Hence, the addition of Acker et al. does not cure the aforementioned deficiencies of Apte et al.

In view of the foregoing differences, it is respectfully submitted that the combination of Apte et al. and Acker et al. does not render obvious claims 3-4 and 10-11. It is requested the rejection of claims 3-4 and 10-11 under 35 U.S.C. §103 be withdrawn.

In addition, the Examiner alleges that Apte et al. teaches the steps of using reflection to obtain an `ejbFindByPrimaryKey` method and invoking the

ejbFindByPrimaryKey method with the SmartKey, but does not teach the step of loading the EJB Home class using JNDI, as required in claim 3 (and similarly in claim 10). To cure this deficiency in Apte et al., the Examiner turns to Acker et al. However, contrary to the Examiner's assertion, Apte et al. does not even teach or suggest the steps of using reflection and invoking the ejbFindByPrimaryKey recited in claim 4 (and similarly in claim 10). In fact, col. 7, lines 31-38 and col. 6, lines 58-67 in Apte et al., cited by the Examiner, merely describes that EJB can be invoked by clients or EJBs residing in one machine can be remotely invoked from another machine. Additionally, Apte et al. clearly states that "one cannot persist EJBs by storing their Home Name and Key Value" (col. 2, lines 36-37). Further, contrary to the Examiner's assertion, Acker et al. does not teach or suggest locating the EJB Home class using JNDI, as required in claim 3. In fact, paragraph [0006] in Acker et al., cited by the Examiner, merely describes that JNDI can be used to find object in the name space. Therefore, the combination of Apte et al. and Acker et al. does not teach or suggest the steps recited in claim 3 (and similarly in claim 10).

Furthermore, the Examiner alleges that Acker et al. teaches the steps of implementing java.util.Comparable interface and delegating to a SmartKey class that performs field-by-field comparison of attributes associated with the primary key, thereby permitting two EJB Handles to be compared without instantiating the corresponding Entity EJB Objects. However, contrary to the Examiner's assertion, Acker et al. does not teach or suggest such implementing and delegating steps recited in claim 4 (and similarly in claim 11). In fact, paragraphs [0045] and [0038] in Acker et al., cited by the Examiner, merely describes states that "it is desirable to allow rebinding of the EJBs in an appropriate scope of the namespace without having to change the EJB deployment data and redeploying" and "a delegation model could just as easily be used, or the scoped initial context factory could completely implement the javax.naming.spi.InitialContextFactory Interface." JNDI can be used to find object in the name space. It is appreciated that one of ordinary skill in the art would not associate the delegation model of Acker et al. to scope the name tree as being remotely related to

delegating to a SmartKey class to perform field-by-field comparison to EJB Handles without instantiating the corresponding Entity EJB Objects, as required in claim 4 (similarly in claim 111). Therefore, the combination of Apte et al. and Acker et al. does not teach or suggest the steps recited in claim 4 (and similarly in claim 11).

Statements appearing above in respect to the disclosures in the cited references represent the present opinions of the applicants' undersigned attorney and, in the event that the Examiner disagrees with any of such opinions, it is respectfully requested that the Examiner specifically indicate those portions of the reference providing the basis for a contrary view.

In view of the above, each of the presently pending claims in this application is believed to be in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to pass this application to issue.

* * *

The Commissioner is hereby authorized to deduct any fee or credit any overpayment to Deposit Account No. 50-0624, under Order No. **NY-THEOR 201.1 (09907976)** from which the undersigned is authorized to draw.

Respectfully submitted,

By 

C. Andrew Im
Registration No.: 40,657
FULBRIGHT & JAWORSKI L.L.P.
666 Fifth Avenue
New York, New York 10103
(212) 318-3000
(212) 318-3400 (Fax)
Attorneys for Applicant